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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Arnd Paulsen

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EXAMINER

FIALKOWSKI, MICHAEL R

ART UNIT

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4173

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,437	Applicant(s) PAULSEN, ARND	
	Examiner MICHAEL FIALKOWSKI	Art Unit 4173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>June 25 2007, August 23 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application has been examined. Claims 1-12 are pending.

Drawings

2. The drawings are objected to because in Figure 1, reference numerals 12a and 12b point to switching matrices labeled "Daten A" and "Daten B", respectively. It is unclear what "Daten" is, as it is not referenced in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Double Patenting

4. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1,6, and 12 of the pending application are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,6, and 11, respectively of copending Application No. 11473279, herein referred to as Ref. A. Although the conflicting claims are not identical, they are not patentably distinct from each other because :

The only difference between these instant claims and the claims in the copending application are minor wording variation (see claim language in italics and underlined below), which does not patentably change the scope of the invention as recited; omission of undesired elements and further what is a step of “locking” in the copending application is now “automatic locking” in this instant application.

Re claim 1, Claim 1 of Ref. A states (with differences in words from the pending application in italics and underlined) :

Method for controlling a device for distribution of audio, video, data or control signals, with the device having at least one switching matrix, which has a number of inputs and a number of outputs, as well as a corresponding number of takes for production of links between the inputs and outputs, with the method comprising the following steps: (a) selection of takes which are required for a signal path between an input and an output; (b) switching of takes selected in step (a) in order to produce the signal path; and (c) automatic locking of the takes in the (“connected”) state selected in step (b).

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Examiner believes using the term "takes" is synonymous with "coupling points" in the pending application, given the context of the claim and the claims failing to further define take or coupling point as a different entity. Also, regarding the "switching of takes" in Ref. A with the "connection of the coupling points", Examiner sees the "take/coupling point" performing the exact same function in both claims given the context of limitation (b) in each claim. Regarding the use of "automatic" in Ref A, Examiner notes that, while a "manual" locking may be possible, the use of limitation (c) as depending on the connection state in step (b) renders limitation (c) as a progression through steps and thus automatically locking of the takes would fall under the same scope as a mere "locking of the coupling points". See also MPEP 2144.04 (III), AUTOMATING A MANUAL ACTIVITY, which is an obvious variation of a defined invention. Regarding the omission of "connected" in Ref. A: limitation (c), by using "the state", has an inherent use of the word connected and may or may not be used without altering the scope of the claim. See also MPEP 2144.4 (II)(a), concerning the omission of undesired features as an obvious variation of a defined invention.

Re claim 6, Claim 6 of Ref. A states (with differences in words from the pending application in italics and underlined) :

Method according to claim 1, wherein a plurality of signal paths are combined to form a signal bundle, and are jointly locked.

The definition of "a plurality of" being interchangeable with "two or more" in the pending application.

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Re claim 12, Claim 11 of Ref. A states (with differences in words from the pending application in italics and underlined) :

Memory medium in which a programme code is stored, which can be stored in the programme memory of a data processing installation and causes a programme to be run which carries out the method steps according to claim 1.

The definition of "memory" being interchangeable with "storage" in the pending application and the definition of "installation" as a noun being interchangeable with "system."

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 8, Applicant recites a "method wherein the locking of the path bundle is carried out by locking the process of joining the path bundle together as well as by the locking of all signal paths which have been joined together to form

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the path bundle". It is unclear how locking the path bundle is achieved by locking together a "process" and "all signal paths", where a process is an abstract idea of steps, and signal paths are physical connections between an input and output.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-3,6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujita et al (2001/0024240).

Re claim 1, Fujita et al discloses a method for controlling a device (via a matrix controller ([0233]) for the distribution of audio, video, data or control signals, (audio or video signals [0709]) with the device having at least one switching matrix (matrix switch), which has a number of inputs and a number of outputs (for example, 10 [0223]) as well as a corresponding number of coupling points (intersection switches, See Figure 3 and [0223]) for production of links between the inputs and outputs, with the method comprising the following steps:

(a) selection of coupling points which are required for a signal path between an input and an output (operate as to only select a video input, for each video output [0223]);

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(b) connection of the coupling points selected in step (a) in order to produce the signal path (turn on the intersections for the signals, in order to supply an input to output [0223]) ; and

(c) locking of the coupling points in the connected state in step (b) (for example, stores connection information for the matrix switches [0670]) .

Re claim 2, Fujita et al discloses the method wherein the coupling points are successively locked in the signal flow direction (intersections are set for the matrix based on the instruction from an input and stored in a table [0316]-[0317], See also [0663]).

Re claim 3, Fujita et al discloses the method wherein the coupling points are locked in the opposite direction to the signal flow direction (input is received first from the output side of the matrix, and then an input side of the matrix is determined [0342], See Also [0661]).

Re claim 6, Fujita et al discloses the method wherein two or more signal paths are combined to form a signal bundle (for example, operator console is set corresponding to output channels 112,113,and 114 [0381]-[0384]) , and are jointly locked (assignment storing means stores the assignments to the operator consoles and functions [0407]).

Re claim 7, Fujita et al discloses the method wherein the process of joining two or more signal paths together to form a path bundle is carried out by the entry of input (for example, operator consoles) or outputs (for example, units or functions) for the

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respective signal paths in a list (assignment storing means stores the assignments to the operator consoles and functions [0381][0407]).

Re claim 8, Fujita et al discloses the method wherein the locking of the path bundle is carried out by locking the process of joining the path bundle together (for example, operator console is set corresponding to output channels 112,113,and 114 [0381]-[0384]) as well as by the locking of all signal paths which have been joined together to form the path bundle (assignment storing means stores the assignments to the operator consoles and functions [0381][0407]).

Re claim 9, Fujita et al discloses the method wherein the path bundle is cancelled by deletion of all the inputs and outputs from the list (in the initial state, all intersections are initialized to an OFF state [0315], as well as operator console column is empty [0324]).

Re claim 10, Fujita et al discloses the method wherein locked signal paths which have been joined together to form a locked path bundle cannot be unlocked (for example, matrix control console can be password protected or require the use of a card [0485-0486][0491-0492]).

Re claim 11, Fujita et al discloses the method wherein the attempt to unlock a locked signal path which is part of a path bundle initiates the indication of a warning message (execution of erroneous settings is refused or a warning is given against the erroneous settings [0744]).

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Re claim 12, Fujita et al discloses a storage medium (ROM/RAM) in which a program code is stored which can be stored in the program memory of a data processing system (board computer [0717]) and causes a program to be run ([0728]) which carries out the method steps as claimed in claim 1 (See also [0317]).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al.

Re claim 4, Fujita et al discloses the method as claimed in claim 2 as stated above, and further wherein the coupling points(intersections) are unlocked (it is possible to store the settings for part of the intersections and reset part of the intersections [0265]). Fujita et al does not explicitly disclose unlocking in the signal flow direction. However Fujita et al teaches of locking the coupling points in the signal flow direction (intersections are set for the matrix based on the instruction from an input and stored in a table [0316]-[0317], See also [0663]). It would have been obvious to one of ordinary skill at the time of the invention in the area of matrix switching in a video environment to unlock the coupling points in the opposite direction to the signal flow direction in the

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method of Fujita et al, with the motivation to unlock the points in the same manner as they were locked.

Re claim 5, Fujita et al discloses the method as claimed in claim 2 as stated above, and further wherein the coupling points are unlocked (it is possible to store the settings for part of the intersections and reset part of the intersections [0265]). Fujita et al does not explicitly disclose the coupling points being successively unlocked or. However Fujita et al teaches of successively (repeated for number of inputs [0343]) locking coupling points in the opposite direction to the signal flow direction (input is received first from the output side of the matrix, and then an input side of the matrix is determined [0342], See Also [0661]). It would have been obvious to one of ordinary skill at the time of the invention in the area of matrix switching in a video environment to unlock the coupling points in the opposite direction to the signal flow direction in the method of Fujita et al, with the motivation to unlock the points in the same manner as they were locked.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Larson et al (4,577,308) is disclosed for using locks in a switching environment with multiple inputs and outputs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL FIALKOWSKI whose telephone number is

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(571)270-5425. The examiner can normally be reached on Monday - Friday 9:30am-7pm EST, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinhee Lee can be reached on (571)272-1977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. F./
Examiner, Art Unit 4173

/Yemane Mesfin/
Examiner, Art Unit 2444